



XR130 Beam

PR-2133

This product manual contains important information about the safe installation and use of this projector. Please read and follow these instructions carefully and keep this manual in a safe place for future reference.

PR LIGHTING LTD.
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Please note that as part of our ongoing commitment to continuous product development, specifications are subject to change without notice. Whilst every care is taken in the preparation of this manual we reserve the right to change specifications in the course of product improvement. The publishers cannot be held responsible for the accuracy of the information herein, or any consequence arising from them.

Every unit is tested completely and packed properly by the manufacturer. Please make sure the packing and / or the unit are in good condition before installation and use. Should there be any damage caused by transportation, consult your dealer and do not use the unit. Any damage caused by improper use will not be assumed by the manufacturer and / or dealer.

ACCESSORIES

These items are packed together with the projector:

Name	Quantity	Unit	Remark
G clamps	2	Pcs	
XLR connector	1	pc	without DMX cable
Safety cord	1	Pc	
Power Cable	1	pc	
Power-Con	2	Pcs	Male and Female one each
User's manual	1	Pc	
Ω clamps	2	Pcs	Optional

SAFE USAGE OF THE PROJECTOR

When unpacking and before disposing of the carton check there is no transportation damage before using the projector. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.

The projector is for indoor use only, IP20. Use only in dry locations. Keep this device away from rain and moisture, excessive heat, humidity and dust. Do not allow contact with water or any other liquids.

The projector is not designed or intended to be mounted directly on to inflammable surfaces.



The projector is only intended for installation, operation and maintenance by qualified personnel.

The projector must be installed in a location with adequate ventilation, at least 50cm from adjacent wall surfaces. Be sure that no ventilation slots are blocked.

Do not project the beam onto inflammable surfaces, minimum distance is 3m.

Avoid direct exposure to the light from the lamp. The light is harmful to the eye.

Do not attempt to dismantle and/or modify the projector in any way.

Electrical connection must only be carried out by qualified personnel.

Before installation, ensure that the voltage and frequency of power supply match the power requirements of the projector.

It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards.

Do not connect this device to any other types of dimmer apparatus.

Make sure that the power-cord is never crimped or damaged by sharp edges. Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

Keep the lamp clean. Do not touch the lamp glass with bare hand.

The projector should always be installed with a secondary safety fixing. A safety cord is supplied for this; it should be attached as shown in “installing the projector” section.

Shields and lens shall be changed if they have become visibly damaged to such an extent that their effectiveness is impaired, for example by cracks or deep scratches.



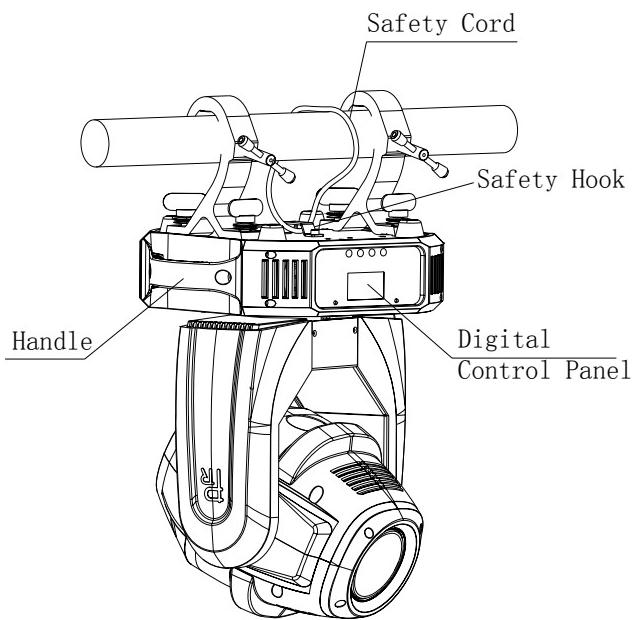
Exterior surface temperatures of the luminaire after 30 minutes operation is 70°C, when steady state is achieved 90°C,

There is no user serviceable parts inside the projector, do not open the housing and never operate the projector with the covers removed.

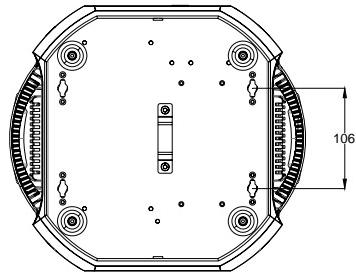
If you have any questions or suggestions, don't hesitate to consult your dealer or manufacturer

Always disconnection from Power, when the device not in use or before cleaning or any maintenance work !

INSTALL THE PROJECTOR



! WARNING
Please run safety cord
through safety hook



Take 2 clamps and the safety cord out from the package and mount 2 clamps on the underside of fixture with 2 retainers attached to each clamp. Hang the fixture on the structure and fasten the screws attached to each clamp. (See the **WARNING** on the underside of the base as shown above) **To pass the SAFETY CORD through the HOLES for safety!** Always ensure that the projector is firmly anchored to avoid vibration and slipping whilst functioning. Always ensure that the structure that you are going to mount the projector to is secure and strong enough to support the weight of a XR 130 Beam

WARNING:

1. The projector MUST be lifted or carried by the HANDLES instead of clamps.
2. For safety the safety cord should afford 10 times the Projector's weight.

FITTING THE LAMP

Lock the yoke before fitting/replacing the lamp just as Shown by Figure 2, after Opening the head's cover of a projector by loosening 4fastfit screws.

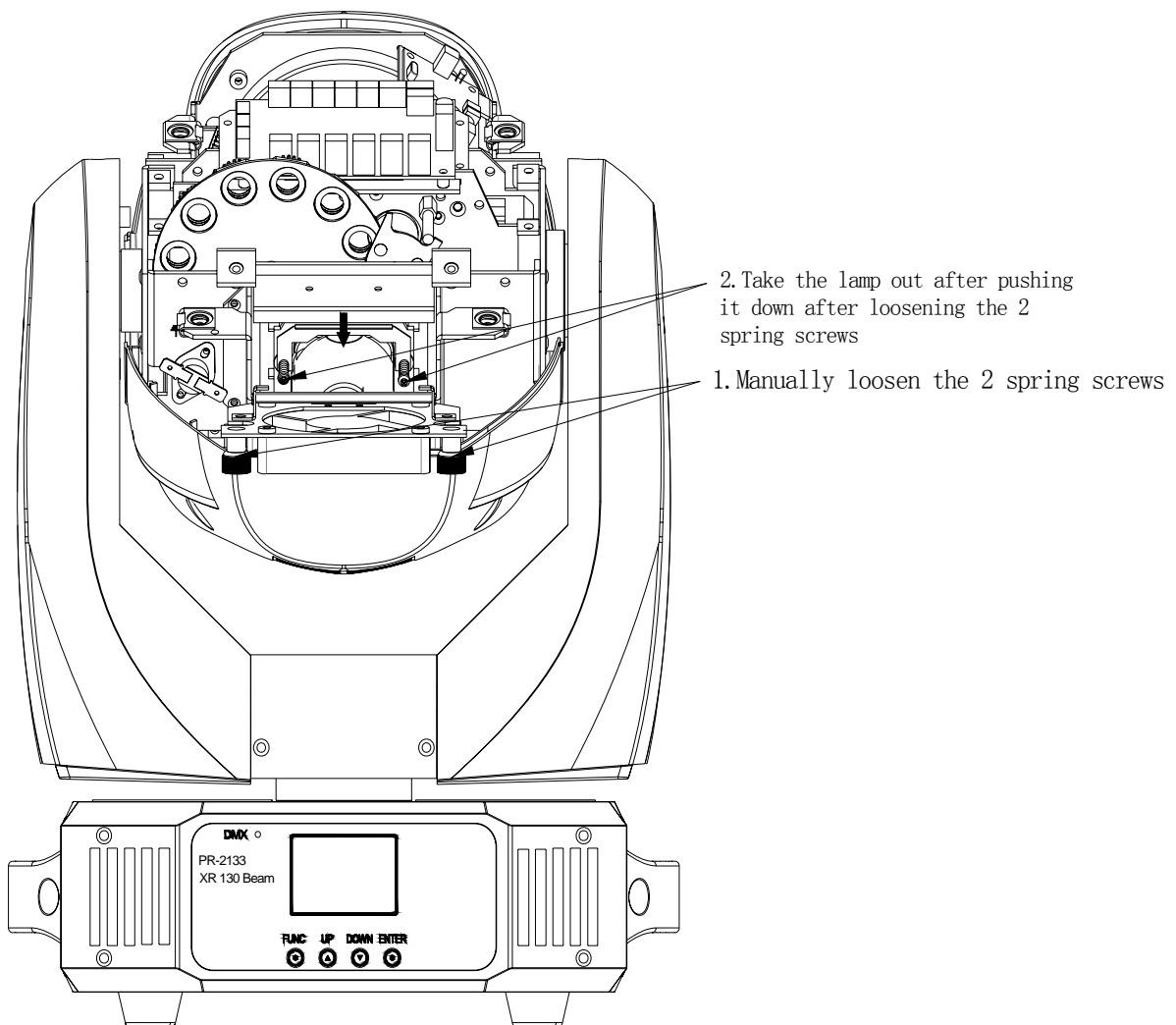
Pull out the lamp from the bottom of the head after rotating it anti-clockwise after holding the lamp's bottom.

Installation and removal are in reverse orders.

Tighten the 4 fastfit screws after the cover is installed.

Note: don't touch the bulb of the new lamp with bare hands so as not to impair the beam output.

Important: Always read "Instructions for use" enclosed with the lamp.



POWER SUPPLY-MAINS

Connect the power cord as follows:

L (live) =brown

E (earth) =yellow/green

N (neutral) =blue

Before connection with mains power, make sure that the voltage and frequency marked on the rating plate of the projector match what are supplied. It is recommended that each projector be supplied separately so that they may be individually switched on and off.

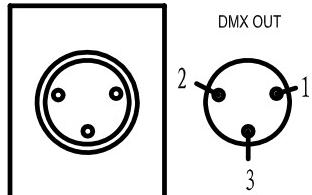
NOTE: If the fixtures' power outputs and inputs are connected in series, please connect the first fixture's power input with the external power supply, and connect its power output with the second fixture's input and so on till all the fixtures are connected. If the supplied voltage is 200V~240V, the maximum number of fixtures connected is 10pcs. If it is 100V~120V, the maximum is 8pcs. The diameters of the wires for the power input and output cables must be equal or bigger than 2.5 mm².

IMPORTANT

It is essential that each projector is correctly earthed(yellow/green twin wire) and the electrical installation conforms to all relevant standards.

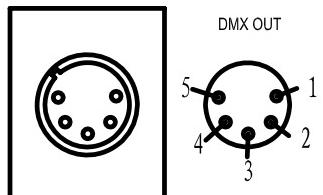
CONTROL CONNECTION

3-PIN



DMX 512	
PIN	FUNCTION
1	GND
2	DATA-
3	DATA+

5-PIN

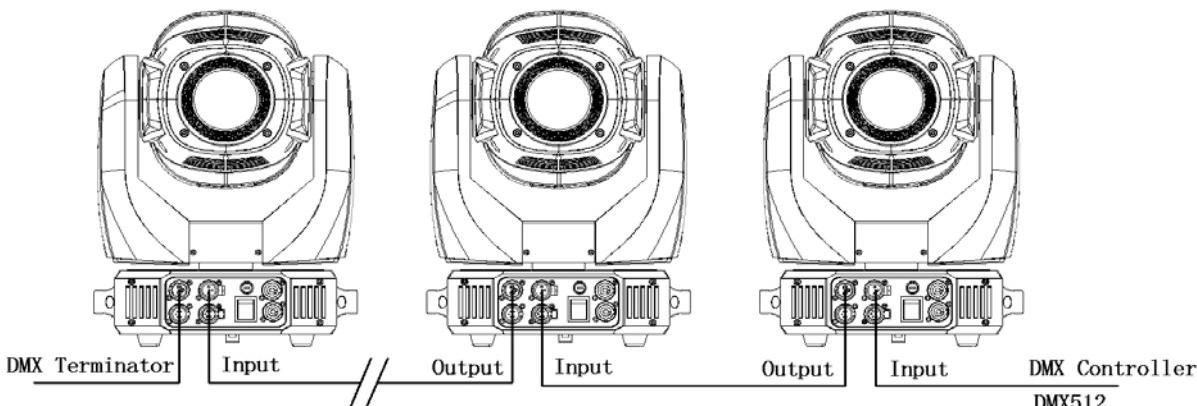


DMX 512	
PIN	FUNCTION
1	GND
2	DATA-
3	DATA+
4	N/C
5	N/C

Connection between controller and projector and between one projector and another must be made with a twin-screened cable, with each wire having at least a 0.5mm in diameter. Connection to and from the projector is via cannon 5 pin (which are included with the projector) or 5 pin XLR plugs and sockets. The XLR's are connected as shown in the figure above.

Note: care should be taken to ensure that none of the pins touch the metallic body of the plug or each other. XLR plugs and sockets mustn't be connected in any way other than mentioned in the above figure. The XR 130 Beam accepts digital control signals in protocol DMX512 (1990).

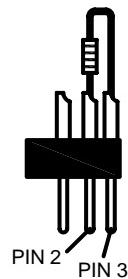
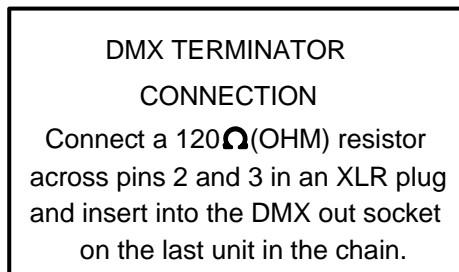
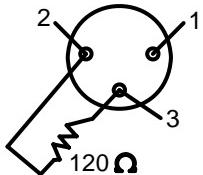
Connect the controller's DMX output to the first fixture's DMX input, and connect the first fixture's DMX output to the second fixture's DMX input and connect the rest fixtures in the same way. Eventually connect the last fixture's DMX output to a DMX terminator as shown in the figure below.



DMX TERMINATOR

In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.

The DMX terminator is simply an XLR connector with a 120Ω (ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last projector in the chain. The connections are illustrated below.



SETUP OPTIONS-PROJECTOR CONFIGURATION

Projector configuration can be set conveniently via push button and LCD display.

Launch the projector and press button **ENTER** for more than 5 seconds to unlock the panel, the LCD will show the function menu of the projector, each main menu has its submenus and each submenu has a specific function. For details, please see the “OPERATION MENU” section.

Press button **UP** or **DOWN** if you want to browse through the various Setup Options.

Press button **ENTER** to save your settings or enter the submenu.

Press button **UP** or **DOWN** to change values(plus or minus)

Press button **FUNC**, it will return to the upper menu. If button **FUNC** not pressed, the default will show display status automatically.

TO SET THE DMX START ADDRESS

Each XR 130 Beam must be given a DMX start address so that the correct projector responds to the correct control signals. This DMX start address is the channel number from which the projector starts to “listen” to the digital control information being sent out from the controller. The XR 130 Beam has 2 DMX modes. There are standard and short modes. For example standard mode has 16channels, so set the No. 1 projector’s address 001, No. 2 projector’s address 017, No. 3 projector’s address 033, and No. 4 projector’s address is 049, and so on.

Launch the projector. Press button **ENTER** more than 5 seconds to unlock panel.

Press button **ENTER** to display DMX address;

Press button **UP** and **DOWN**, you can set the address;

Press button **ENTER** to confirm; after powered on next time, the default will be last value saved

Press button **FUNC**, it will return to the upper menu.

OPERATION MENU

First Menu	Secondary Menu	Third Menu	Fourth Menu
DMX Address	XXX (XXX:1~497)	Short 1~501 Standard 1~497	
Reset	Are You Sure		
Config Settings	DMX Channel Mode (Default: Standard)	Standard16	
		Short 12	
	Loss of DMX	When DMX is Lost Normal Time out	
		When DMX is Lost Hold Last value	
	Lamp Control	By Control Channel	
		By Power On	
		By DMX Present	
	Pan Calibration	0~127	
	Tilt Calibration	0~127	
	Parameter Transm	YES	
	Factory Settings	YES	
Option Settings	Color Wheel Positions	Color Positions Steeped	
		Color Positions Linear	
	Pan DMX Invert	Pan DMX Invert OFF	
		Pan DMX Invert ON	
	Tilt DMX Invert	Tilt DMX Invert OFF	
		Tilt DMX Invert ON	
	Pan Tilt Swap	Pan Tilt Swap OFF	
		Pan Tilt Swap ON	
	Dimmer Invert	Dimmer Invert OFF	
		Dimmer Invert ON	
	Pan Angle Range	360 / 720	
	Defaults	YES	
Display Options	Language	English	
		Chinese	
	Display Mode	Display On Always	
		Display Off After Delay	
	Display Invert	Display Invert OFF	
		Display Invert ON	
	Display Dimming	1~10	
	Display Contrast	Display Contrast XX(1~18), default 9	

	Lamp Hours	Hours: xx	
	Reset Lamp Hours	Are You Sure	
	Total Hours	Hours: xx	
	Temperature	Temperature XX°C	
Information	Software Version	Display Board	Display Board= X.X.X
		Fan Board	Fan Board= X.X.X
	View DMX Values	DMX Channel 1=XXX	
	Electronic SN	Electronic SN= *****	
	Test Modes	Self Test	Yes
	Lamp Manual Control	Turn Lamp On	Yes
		Turn Lamp Off	Yes
Wireless Options (Optional)	Wireless Mode	Wireless Mode XLR First	
		Wireless Mode Wireless First	
		Wireless Mode Wireless Only	
		Wireless Mode XLR Only	
		Wireless Mode Wireless To XLR	
	Un-Link Wireless	YES	
	Master Mode	DMX Mode	YES
		Preset Memory	YES
		User Memory	YES
		Memory Edit	Static Scene (1~16 scenes)
Operation Mode	Slave Mode		Strobe
			Dimmer
			Color wheel
			Rotating Gobo Wheel
			Gobo Rotation
			Effect Wheel Settings
			Prism Rotation
			Focus
			Pan Location
			Tilt Location

ERROR MESSAGES

In the course of launch, Projector examines automatically whether there are errors and if there are, it will display information as follows:

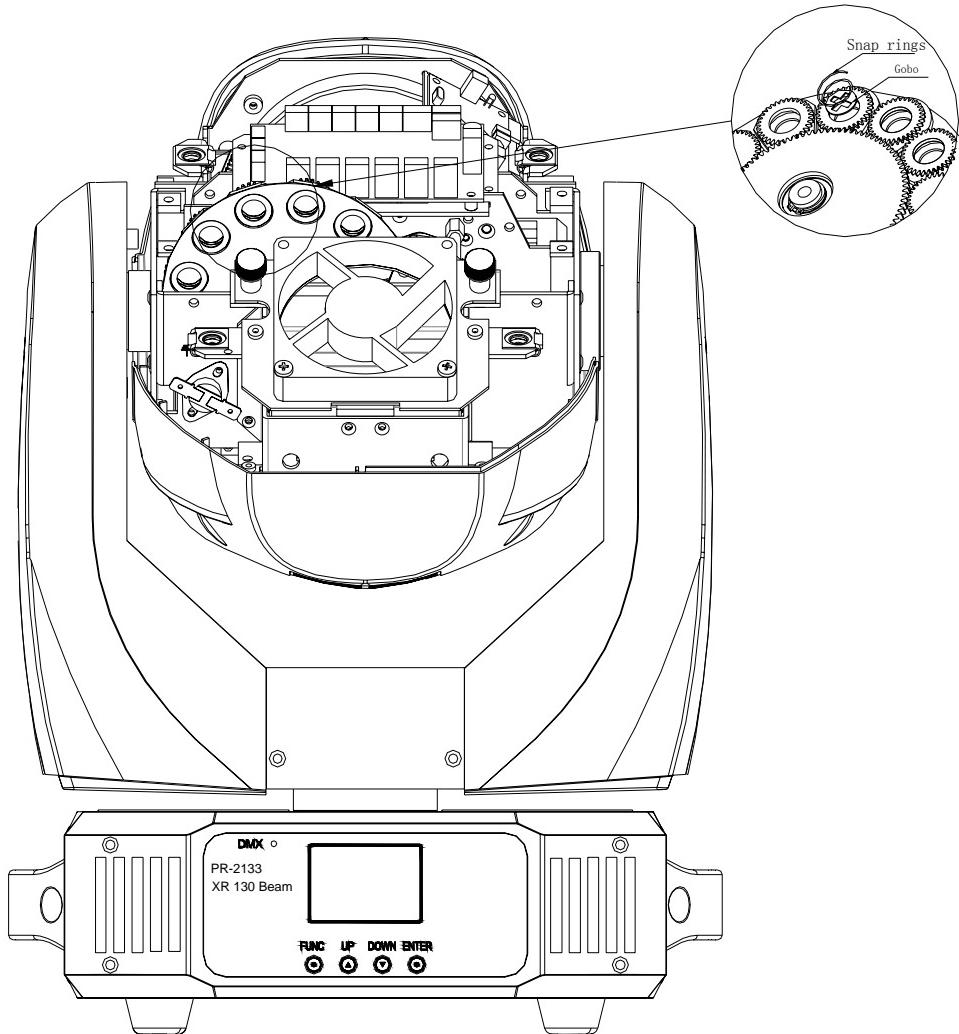
Head Fan 1 Fail	
Head Fan 2 Fail	

REPLACING GOBOS

Disconnect from power ,loosen 4 fastfit screws of the side cover, and open the cover as shown by the figure below.

Replace an old gobo of the rotating gobo wheel with a new gobo.

Tighten the 4 fastfit screws after the side cover is put back.



DMX PROTOCOL					
Short mode	Standard mode	Extended Mode	FUNCTION	DMX	DESCRIPTION
1	1		Strobe	000-010	Close
				011-025	Open
				026-225	Strobe speed from slow to fast
				226-239	Macro 1
				240-241	Macro 2
				242-246	Macro 3
				247-255	Open
2	2		Dimmer	000-255	Linear dimming
3	3		Color Wheel	000-008	White
				009-016	Color 1
				017-024	Color 2
				025-032	Color 3
				033-040	Color 4
				041-048	Color 5
				049-056	Color 6
				057-064	Color 7
				065-073	Color 8
				074-082	Color 9
				083-091	Color10
				092-100	Color11
				101-109	Color12
				110-118	Color13
				119-127	CTO
4	4		Rotating Gobo Wheel	128-191	Rotation ,Clockwise from slow to fast
				192-255	Rotation, Anti-clockwise from slow to fast
				000-017	White
				018-027	Gobo 1
				028-037	Gobo 2
				038-047	Gobo 3
				048-057	Gobo 4
				058-067	Gobo 5
				068-077	Gobo 6
				078-087	Gobo 7
				088-097	Gobo 8
				098-107	Gobo 9
				108-117	Gobo 10
				118-127	Gobo 11
				128-147	Rotation (Clockwise From slow to Fast)
				148-167	Rotation (Anti-clockwise From slow to Fast)
				168-175	Shake of Gobo 1 from slow to fast

				176-183	Shake of Gobo 2 from slow to fast
				184-291	Shake of Gobo 3 from slow to fast
				192-199	Shake of Gobo 4 from slow to fast
				200-207	Shake of Gobo 5 from slow to fast
				208-215	Shake of Gobo 6 from slow to fast
				216-223	Shake of Gobo 7 from slow to fast
				224-231	Shake of Gobo 8 from slow to fast
				232-239	Shake of Gobo 9 from slow to fast
				240-247	Shake of Gobo 10 from slow to fast
				248-255	Shake of Gobo 11 from slow to fast
5	5		Gobo Rotation	000-128	Gobo Indexing (0°-540°)
				129-188	Rotation (Clockwise From slow to Fast)
				189-195	Stop
				196-255	Rotation (Anti-Clockwise From slow to Fast)
	6		Gobo Rotation Fine	000-255	Gobo Rotation in 16 Bit
6	7		Effect Wheel	000-063	White
				064-127	Prism
				128-191	Deep Frost
				192-255	Light Frost
7	8		Prism Rotation	000-128	Stop
				129-191	Rotation(Clockwise from slow to fast)
				192	Stop
				193-255	Rotation(Anti- Clockwise from slow to fast)
8	9		Focus	000-255	Linear Focusing
9	10		Pan	000-255	Pan(0°~720°)
	11		Pan Fine	000-255	Pan in 16 bit precision
10	12		Continuous Pan	000-127	Stop
				128-191	Rotation (Clockwise From slow to Fast)
				192-255	Rotation (Anti-Clockwise From slow to Fast)
11	13		Tilt	000-255	Tilt(0°~270°)
	14		Tilt Fine	000-255	Tilt in 16 bit precision
	15		Pan & Tilt Speeds	000-255	Pan & Tilt Speed from Fast to Slow
12	16		Control	000-047	Reserved
				048-080	Reset
				081-112	Reserved
				113-144	Lamp Off(Delay for 3 s)
				145-168	Reserved
				169-200	Lamp Full Power
				201-223	Reserved
				224-255	Lamp Full Power

Remark:

If you intend to turn on/off the lamp via the last channel of the controller, don't attempt to push the channel to value 224-255 immediately after turning it off, or push the slide bar to value 224-255 to wait it cooling. Under these 2 circumstances, the lamp can not be turned on. The right operation is: turn it off--cool down--push the slide bar to turn it on.

LED INDICATION

Green LED indication	On	DMX signal OK
	Off	No DMX signal
	Flash	DMX signal error
Blue LED indication	On	Wireless Signal OK
	Off	Not linked with any transmitters
	Flash	Loss of connection or being linked with a transmitter

MAINTENANCE

If the projector's lens becomes damaged or broken it should be replaced. If the lamp becomes damaged or deformed in any way it must be replaced. If the light from the lamp appears dim this would normally indicate that it is reaching the end of its life and it should be changed at once, aged lamps run to the extremity of their life might explode. If the projector does not function, check the fuses on the power socket of the projector, they should only be replaced by fuses of the same specification. The projector has overheat protection device that will switch off the projector in case of overheating. Should it happen, check if the fans are blocked or not, or if they are dirty, clean them before switching on the projector again.

Any maintenance work should only be carried out by qualified technicians.

LUBRICATION

To ensure the smooth rotation of the rotating gobos and movement of the lens for focusing, it is recommended that the bearings for the rotating gobos and the 2 sliding tracks for the focusing lens holder be lubricated every two months. Use only high quality, high-temperature grease .

KEEPING THE PROJECTOR CLEAN

To ensure the reliability of the projector it should be kept clean. It is recommended that the fans should be cleaned every 15 days. The lens and dichroic colour filters should also be regularly cleaned to maintain an optimum light output. **Do NOT use any type of solvent containing chemical elements on dichroic colour filters.**

Cleaning frequency depends on the environment in which the fixture operates. A soft cloth and typical glass cleaning products should be used in cleaning. It is recommended to clean the external optics at least once every 20 days and clean the internal optics at least once every 30 / 60 days.

Do not use any organic solvent, e.g. alcohol, to clean the reflector mirror, dichroic colour filters or housing of the apparatus.

TROUBLESHOOTING

PROBLEM	ACTION
The projector doesn't switch on	<ul style="list-style-type: none"> ➤ Check the fuse on the power socket. ➤ Check the lamp.
The lamp is on but the projector doesn't respond to the controller	<ul style="list-style-type: none"> ➤ Make sure that the fixture's start address is right ➤ Replace or repair the XLR signal cable.
The projector functions intermittently	<ul style="list-style-type: none"> ➤ Make sure the fan is working well or fans and their shields are not blocked
Beam appears dim, Low in brightness	<ul style="list-style-type: none"> ➤ Make sure the lamp is within its lifespan ➤ Remove dust or grease from the lenses.
The project image appears to have a halo	<ul style="list-style-type: none"> ➤ Carefully clean the lamp, optical lenses and other components.
Heavily Defective Beam	<ul style="list-style-type: none"> ➤ Check if lens are in good condition(not cracked) ➤ Clean dust or grease on the lens.

TECHNICAL DATA

VOLTAGES:

100V~240VAC, 50/60Hz

POWER CONSUMPTION:

240W@220V

LAMP:

OSRAM	SIRIUS HRI 132W
Colour Temperature	8800K
Manufacturers Rated Lamp Life	6000hours

COLOURS:

1 Color Wheel:13colors +CTO+white

Optional Stepping/linear color changing

ROTATING GOBO WHEEL

1Rotating Gobo Wheel: 11 gobos(8pcs rotatable)+ white

Shake effects with variable speeds, bi-directional wheel scrolling at variable speeds

Gobos replaceable

Gobos' outer size: Ø 11.8mm

Gobos' Image size: Ø 6mm

EFFECT WHEEL:

1pc,8-facet rotating Prism(bi-directional with variable speeds)+ 1Deep Frost filter +1light Frost filter+White

FOCUS:

Linear focusing

DIMMER:

linearly adjustable

STROBE:

Double shutter blades, 0.3~25 F.P.S with macros

HEAD MOVEMENT:

Continuous Pan movement, Tilt 270° with auto position correction

BEAM ANGLE:

0°~ 3°

CONTROL:

DMX512, 3-pin and 5-pin interfaces
RDM Protocol
12 channels in short mode, 16channels in standard mode
Self-test mode

OTHER FUNCTIONS:

Adjustable Pan & Tilt speed
The display for the fixture's and the lamp's hours respectively
English and Chinese LCD display with its brightness and contrast adjustable
Energy saving ballast
Auto-Diagnosis by Sensors
Isolated Input DMX signal
Modular Structure for easy maintenance

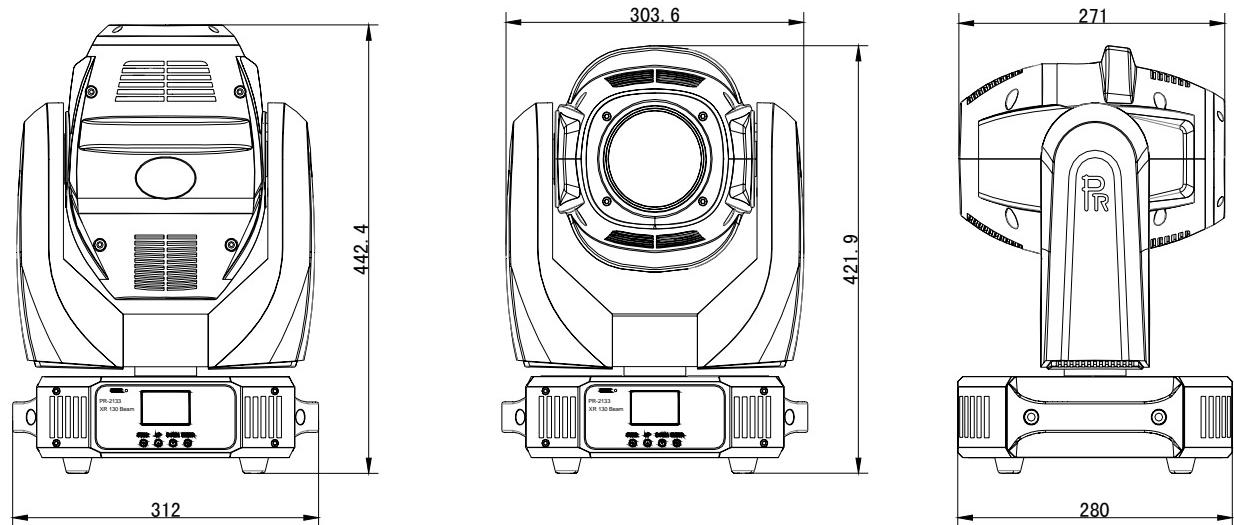
HOUSING:

High temperature ABS, IP20

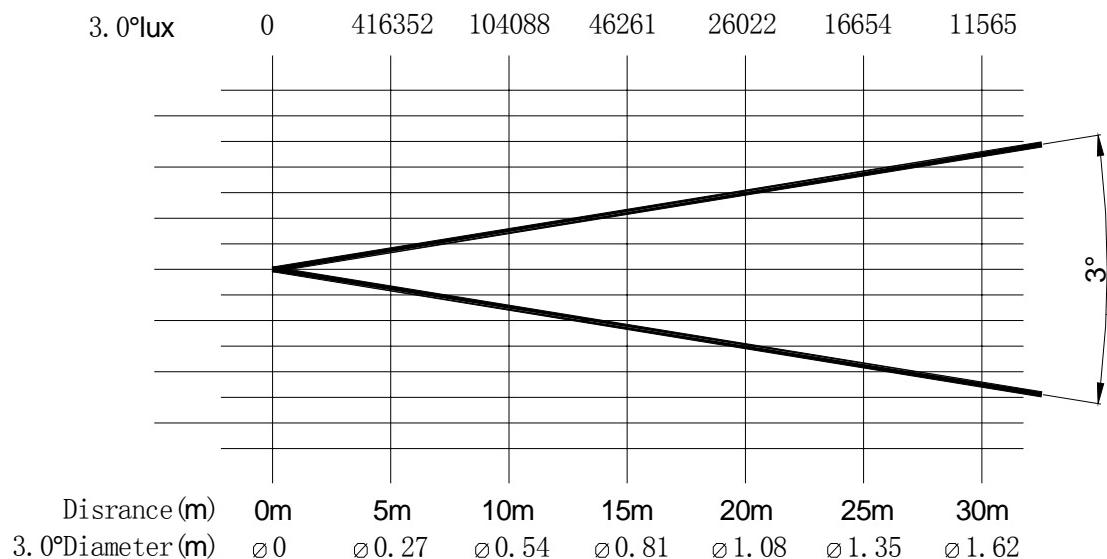
NET WEIGHT:

13.2Kg

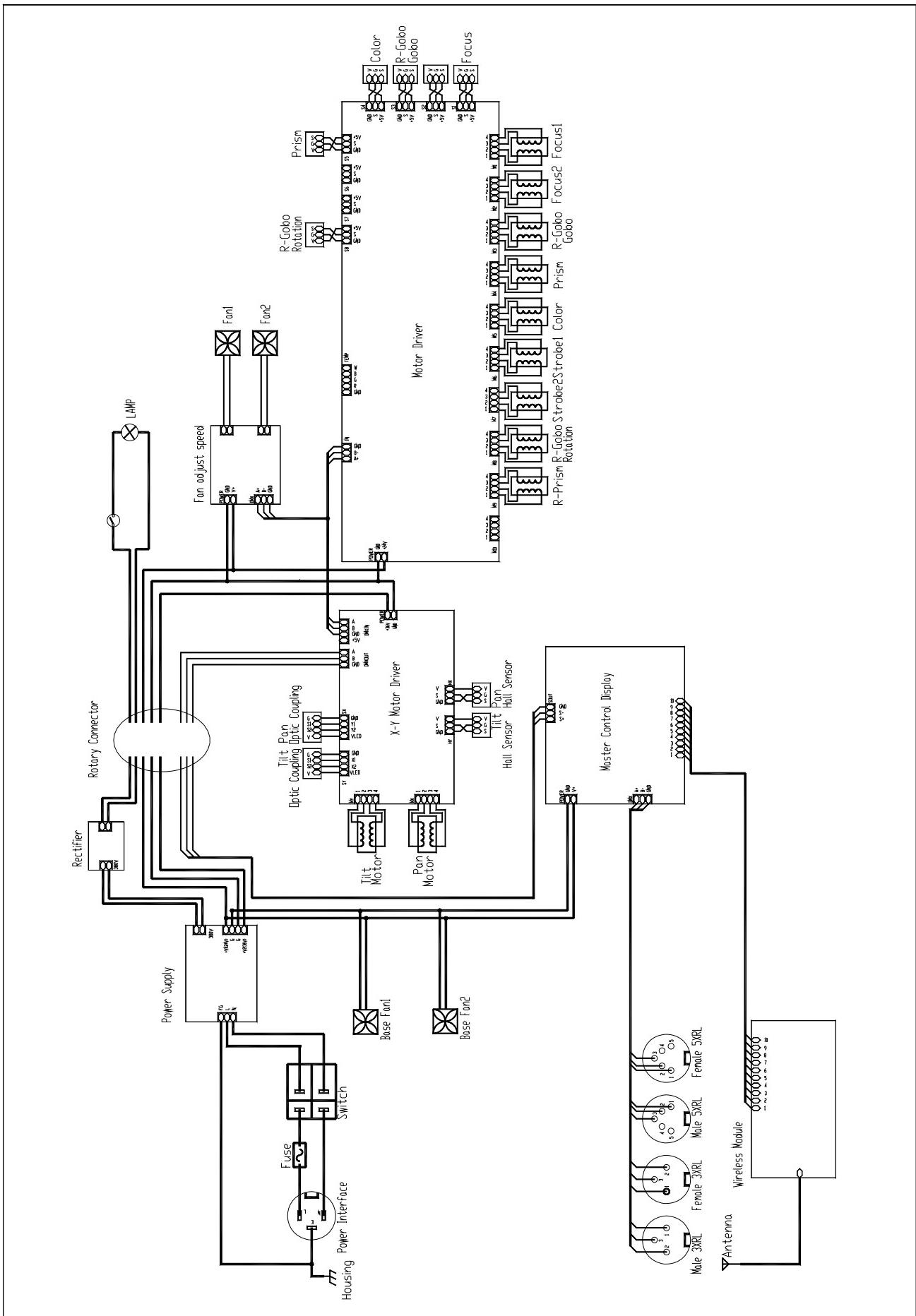
SIZES:



LIGHT OUT:



Electrical Diagram:



Component Order Code

NAME	PART NO.	QUANTITY	REMARK
PAN MOTOR	030040174	2	
TILT MOTOR			
STROBE MOTOR	030040220	3	
COLOR WHEEL MOTOR			
ROTATING GOBO WHEEL MOTOR	030040222	1	
GOBO ROTATION MOTOR	030040236	2	
PRISM ROTATION MOTOR			
EFFECT WHEEL MOTOR	030040154	1	
FOCUS MOTOR	030040116	2	
TURBO- FAN	030060072	1	
LAMP FAN	030060055	1	
FAN IN BASE BOX	030060069	2	
ELECTRONIC BALLAST OSRAM	040070120	1	
LAMP OSRAM	100070036	1	
ROTATING GOBO WHEEL ACCESSORY	120110685	1	
COLOR WHEEL ACCESSORY	120110663	1	
EFFECT WHEEL ACCESSORY	1120110684	1	
POWER SWITCH	190010185	1	
THERMAL SENSOR	190010171	1	
PAN / TILT DRIVER BOARD	230060356	1	
LCD MASTER BOARD	230060357	1	
FAN DRIVER BOARD	230060358	1	
MOTOR DRIVER BOARD	230060359	1	
TILT BELT	290151389	1	
PAN BELT	290151390	1	
EFFECT WHEEL IN/OUT BELT	290151396	1	
GOBO ROTATION BELT	290151409	1	
FOCUS BELT	290151410	2	
PRISM ROTATION BELT	290151411	1	
PRISM IN/OUT BELT	290151412	1	

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